I. General Remarks Concerning This Response

Claims 1-30 are currently pending in the present application. No claims have been amended, added, or canceled in this response. Reconsideration of the claims is respectfully requested.

Applicant notes that the Office action did not acknowledge that a set of formal drawings were filed with the PTO. Applicant requests an acknowledgment of the receipt of the formal drawings and an indication of whether or not the formal drawings were acceptable.

II. Summary of Present Invention

A method, system, apparatus, and computer program product is presented for management of a distributed data processing system on behalf of a plurality of management customers. The distributed data processing system is logically represented as a set of scopes, wherein a scope is a logical organization of network-related objects. Endpoint objects, system objects, and network objects are logically organized into a set of scopes that do not logically overlap. Each scope is uniquely assigned to a management customer. The distributed data processing system is managed as a set of logical networks in which a logical network contains a set of scopes and in which each logical network is uniquely assigned to a management customer. An administrative user may dynamically reconfigure the logical networks within the distributed data processing system while managing the logical networks for a set of customers..

III. 35 U.S.C. § 102(b)—Anticipation—*Hamner et al.*

The Office action has rejected claims 1-8, 11-18, and 21-28 under 35 U.S.C. § 102(b) as anticipated by Hamner et al., "Defining a Schema for a Database Representing a Model of a Computer Network", U.S. Patent No. 5,960,439, filed 12/23/1995, issued 09/28/1999. This rejection is respectfully traversed.

The Office action begins by analyzing claim 1. Independent claim 1 reads as follows:

> 1. A method for management of a distributed data processing system, wherein the distributed data processing system is managed on behalf of a plurality of management customers, the method comprising:
>
> representing the distributed data processing system as a set of scopes, wherein a scope comprises a logical organization of network-related objects;
>
> associating each scope with a management customer, wherein each scope is uniquely assigned to a management customer, wherein each scope is uniquely associated with a set of configuration parameters for managing each scope;
>
> managing the distributed data processing system as a set of logical networks, wherein a logical network comprises a set of scopes, and wherein each logical network is uniquely assigned to a management customer; and
>
> allowing an administrative user to dynamically reconfigure logical networks within the distributed data processing system.

With respect to the first element of independent claim 1, i.e. the element of "representing the distributed data processing system as a set of scopes, wherein a scope comprises a logical organization of network-related objects", the rejection refers to the abstract, Figs. 1, 2A, and 2B, and the text at column 3, lines 40-67; the text at column 3, line 30, to column 4, line 7, states:

> FIG. 1 illustrates a computer network 10 in which the present invention may be implemented. The network 10 includes a number of individual computer systems 12, 15, and 20. These computer systems include personal computer (PC) systems 20 that are clients of either a management server 12 or a managed server 15. Although many servers

may be present in the network 10, only one server, the management server 12, is required in order to implement the present invention. At least some of the services, including control software for coordinating the various services, are implemented within the management server 12. The managed server 15 represents any server in the network 10 other than the management server 12. It should be appreciated that, in any given network in which the present invention is implemented, there may be multiple management servers 12 or managed servers 15.

As will be described in greater detail below, the core services gather data, either periodically or in response to a user command, about the current physical and logical layout of the network. This data, which includes the types of devices in the network, the quantity of each type of device, and their connectivity, is then stored in a database representing a network "map". In addition, the core services gather and maintain data regarding tasks which can be performed upon each of the devices. Tasks are actions that can be taken to troubleshoot, monitor, or report on devices in the network. Some examples of tasks which might be performed on various devices in a network are: viewing the screen of a particular PC; displaying packet counts; running a report; executing a remote virus scan; rebooting selected workstations; displaying print jobs; or, displaying non-functioning printers.

A display, referred to in this description as the "logical view", shows symbolically the devices in the network and associated performable tasks. In one embodiment, the devices are shown as part of a hierarchical structure based on the stored network map. Devices can be organized into various device groups, which are user-definable, and tasks can be organized into various user-definable task categories, which are also user-definable. The user may initiate any of the displayed tasks by applying a user input via a "control panel" screen (e.g., by double-clicking on a task icon with a mouse).

The abstract of Hamner et al. states:

> A computer-implemented method of managing a computer network including a plurality of devices is provided, wherein a plurality of network management tasks are performable upon the devices. Data is gathered about a present configuration of the network, including the types of devices in the network, the quantity of each type of device present in the network, the relationships between the devices, and the tasks performable upon each of the

devices. The data is then stored in a database representing a network map. A display is generated corresponding to the network map using the data in the database. The display shows an association of the devices with the tasks performable on the devices using bitmap representations of the devices and tasks. The display may include hierarchical, schematic, or geographical representations of the devices on the network. The devices are organized into a plurality of groups. In response to a user input selecting a device or group, the tasks performable by that device or group are identified on the display. A user may initiate any one of the displayed tasks by applying a user input selecting that task.

The rejection summarizes the teachings of Hamner et al. with respect to the first element of claim 1 by stating: "Hamner disclosed data based represent [sic] network map wherein view logical devices and groups and their task." Applicant would agree that Hamner et al. discloses representation of views of logical devices and logical groups for a network map.

Applicant disagrees that Hamner et al. discloses the functionality of scoping a logical network as is disclosed in the present patent application. Assuming that the rejection is implying that a scope is analogous to a device group, the present application allows a system administrator to select or request a much richer set of functions that are to be performed against a scope. Although this functionality is not stated within the first element of claim 1, the manner in which a scope is employed is further claimed with respect to the other elements of claim 1. In other words, this distinction becomes more important as one interprets the remainder of claim 1.

More importantly, Applicant strongly disagrees that Hamner et al. discloses the second element of claim 1, i.e. "associating each scope with a management customer, wherein each scope is uniquely assigned to a management customer, wherein each scope is uniquely associated with a set of configuration

parameters for managing each scope". The rejection asserts that Hamner et al. teaches this feature in its abstract, Figs. 1, 2A, and 2B, and the text at column 4, which states:

> I. User Interface
>
> FIG. 2A illustrates an example of a logical view 200 display for a typical network. The logical view 200 includes a device window 201 and a task window 202. Devices and device groups in the network are represented in the device window 201. Each group and each device is represented with its name and a bitmap (icon). For example, device window 201 includes bitmaps 205, 207, and 208 representing the "PC" group, the "Printer" device group, and the "Server" device group, respectively. Double-clicking on a group bitmap with a cursor control device (e.g., a mouse, trackball, etc.) will cause that group to be expanded in the device window 201 into a tree hierarchy consisting of all devices within that group. For example, "Guest" 206 and "User 1" 210 are displayed descending from "PC" 205, because those devices are members of the "PC" group.
>
> The task window 202 displays the tasks and categories of tasks that can be performed on a particular device or group which has been selected in the device window 201. For example, the tasks and task categories displayed in task window 202 represent tasks/categories that can be performed upon the device "User 1", the bitmap 206 of which has been selected (and is therefore enclosed by a box) within the device window 201. In the task window 202, tasks 211, 212, and 213 ("Display packet counts", "Filter on selected IPX protocol devices", and "Show print jobs belonging to selected user", respectively) each are members of the task category "Monitor" 209. Selecting a different device or group in the device window 201 will cause a different set of tasks/categories to be displayed corresponding to the selected device or group.
>
> The user can cause any displayed task to be performed upon a device. A task is initiated by the user's selecting the bitmaps of the desired task and the device or group upon which the task is to be performed, and then entering a predetermined user input, such as selecting an option from a pull-down menu, or double-clicking with the cursor control device on one of the tasks.
>
> In one embodiment of the present invention, the device window 201 displays a tree hierarchy showing the logical or

> physical connection of all devices in the network, organized into device groups. FIG. 2B shows an example of a display consisting of a tree hierarchy of devices, as represented by their bitmaps and names. Each of the devices belongs to the group "Server". The group "Server" includes a device "Server 1". Devices "NIC" (Network Interface Card) and "USER Agent" are components of the device "Server 1" and are therefore displayed with their names enclosed by the symbols "< >". Devices "GUEST", "SUPERVISOR", "User 1", and "User 2" are attached to (but not components of) device "Server 1". A second "NIC" is a component of device "User 2". It should be appreciated that alternative embodiments of the present invention might include schematic, geographic, or other views of the layout of the network, in addition to or instead of a tree hierarchy view.

The rejection summarizes the teachings of Hamner et al. with respect to the second element of claim 1 by stating: "Hamner disclosed network map in logical view devices can be organized in device groups, which user definable [sic]." As stated in the rejection, Hamner et al. clearly discloses the ability of a network administrator to obtain a logical view of network-related devices that are organized into device groups, and these device groups are clearly user-definable. However, Applicant disagrees that Hamner et al. discloses the second element of claim 1.

Hamner et al. does not disclose that each scope becomes associated with a management customer and that each scope is *uniquely* assigned to a management customer, which is explicitly stated in the claim language. At most, Hamner et al. discloses that a given physical device can be labeled with a username. For example, FIG. 2A shows an application window of a network administration utility in which devices are represented as a bitmaps or icons within the window; within the window, the four icons of four PC devices are labeled with "Guest", "Supervisor", "User 1", and "User 2". Similar functionality is shown in FIG.

2B; both of these figures are described in the text at column 4, as referenced by the rejection. Thus (although not explicitly stated in the rejection), a given device can be assigned to a given user. However, at most, Hamner et al. discloses that a single physical device can be assigned to or associated with a single user. In contrast, the present invention provides functionality in which each scope (which represents a logical organization of network-related objects) is associated with a management customer, and each scope is uniquely assigned to a management customer, which is explicitly claimed; Hamner et al. does not disclose this feature.

Applicant also strongly disagrees that Hamner et al. discloses the third element of claim 1, i.e. "managing the distributed data processing system as a set of logical networks, wherein a logical network comprises a set of scopes, and wherein each logical network is uniquely assigned to a management customer". The rejection asserts that Hamner et al. teaches this feature in its Figs. 1-3, and the text at columns 5 and 7. The rejection summarizes the teachings of Hamner et al. with respect to the third element of claim 1 by stating: "Hanmer [sic] disclosed database provide [sic] logical structure of network devices which are definable on based user". Although it is unclear what is meant in the rejection by the phrase "which are definable on based user", a reasonable interpretation of the assertion is that a logical structure of network device is definable by a user. Rather than copy the text of columns 5 and 7 herein, Applicant merely agrees with the rejection's interpretation of this portion of Hamner et al.; Hamner et al. clearly teaches that a device group, which is a logical structure of network devices, can be user-defined.

Applicant's admission with respect to user-definable device groups as taught by Hamner et al., however, is not an admission

that this feature of Hamner et al. is analogous or equivalent to Applicant's claimed feature. Whereas Hamner et al. discloses user-definable device groups or user-definable logical structures of network devices, Hamner et al. does not disclose the features of the present invention as disclosed and claimed by the present patent application. The present patent application discloses and explicitly claims the feature of "managing the distributed data processing system as a set of logical networks, wherein a logical network comprises a set of scopes, and wherein each logical network is uniquely assigned to a management customer". The functionality of the present application is much more extensive and provides a robust network management framework for supporting the management of the networks of multiple customers in an integrated manner.

With respect to the fourth element of independent claim 1, i.e. the element of "allowing an administrative user to dynamically reconfigure logical networks within the distributed data processing system", the rejection refers again to Figs. 2A and 2B and the text at column 4. The rejection summarizes the teachings of Hamner et al. with respect to the fourth element of claim 1 by stating: "Hanmer [sic] disclosed in logical view where Administrator can arrange devices in different way to provide most useful way to present network organization." Again, Application believes that the rejection's summarizing statement of the features of Hamner et al. is a fair interpretation of the features that are disclosed in Hamner et al., yet Applicant again disagrees that the features that are disclosed in Hamner et al. are analogous or equivalent to the feature that is claimed as the fourth element of claim 1. Applicant asserts that Hamner et al. does not disclose the feature of "allowing an administrative user to dynamically reconfigure logical networks" as explicitly stated in the fourth

element of claim 1, wherein an administrator manages a distributed data processing system as a set of logical networks, wherein a logical network comprises a set of scopes, wherein each logical network is uniquely assigned to a management customer, wherein each scope becomes associated with a management customer, and wherein each scope is uniquely assigned to a management customer, as explicitly stated elsewhere in claim 1.

With respect to dependent claim 2, which recites the feature of "dynamically reconfiguring the distributed data processing system to introduce a new scope by logically dividing a pre-existing scope", and dependent claim 3, which recites the feature of "wherein the new scope is introduced without physically introducing a new network, system, or endpoint to the distributed data processing system", the rejection refers again to the features of Hamner et al. in which an administrator can define and manipulate device groups. Applicant disagrees that Hamner et al. discloses these features because, as discussed above, the manner in which the scopes are processed by the present invention are not equivalent nor analogous.

Dependent claims 4-6 refer to functional features for handling information with respect to management customers. Since Hamner et al. does not disclose the handling of scopes within logical networks, or in the terminology of Hamner et al., the handling of device groups, with respect to multiple management customers, Hamner et al. simply cannot disclosed the claimed features, notwithstanding the assertions to the contrary by the rejection.

For example, dependent claim 4 recites the feature of "dynamically reconfiguring the distributed data processing system by logically moving a scope between management customers." With respect to claim 4, the rejection states:

"Hanmer [sic] disclosed determined periodically [sic] to user logical configuration of the network and store configuration on the database". Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of the text of Hamner et al. at column 5, lines 36-39 and column 7, lines 1-40, as recited in the rejection, the logical argument that is presented by the rejection is a non sequitur because one cannot deduce the claimed features for handling information for multiple management customers from the features in Hamner et al. concerning a user-defined logical configuration of a network.

Dependent claim 5 recites the feature of "dynamically reconfiguring the distributed data processing system to introduce a new management customer." With respect to claim 5, the rejection states: "Hanmer [sic] disclosed in the database (PNM) where new nodes are inserted". Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of the text of Hamner et al. at column 8, lines 1-45, as recited in the rejection, the logical argument that is presented by the rejection is a non sequitur because one cannot deduce the claimed features for handling information for a new management customer in relation to the claimed scopes and logical networks from the features in Hamner et al. concerning insertion of new nodes within a user-defined logical configuration of a network.

Dependent claim 6 recites the feature of "wherein the new management customer is introduced without physically introducing a new network, system, or endpoint to the distributed data processing system." With respect to claim 5, the rejection states: "Hanmer [sic] disclosed in the PNM manger [sic] on a front end of database network graph where new nodes are inserted". Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of Hamner et al. (for which the rejection does not cite any portion of Hamner et

al.), the logical argument that is presented by the rejection is a non sequitur because one cannot deduce the claimed features for handling information for a new management customer without introducing a new physical device from the features in Hamner et al. concerning insertion of new nodes within a user-defined logical configuration of a network as stored in a database network graph.

With respect to dependent claim 7, Hamner et al. discloses various features with respect to a discovery process on a network. However, Applicant again notes that Hamner et al. does not disclose the features of the independent claim from which claim 7 depends.

With respect to dependent claim 8, dependent claim 8 recites the feature of "wherein dynamic discovery is limited to a scope assigned to a particular management customer." With respect to claim 8, the rejection states: "Humner [sic] disclosed network can be polled automatically where discover manger where user can be user defined". It is entirely unclear what the rejection is attempting to state with respect to claim 8. Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of Hamner et al. at column 6, lines 1-30 and lines 50-67 with respect to automatic polling, the logical argument that is presented by the rejection is a non sequitur because one cannot deduce the claimed feature of performing dynamic discovery with respect to a particular management customer's scope from the features in Hamner et al. concerning automatic polling by a discovery manager.

Hamner et al. clearly does not disclose features as required by the language of independent claim 1 and dependent claims 2-8 of the present application. As stated at MPEP § 2131: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently

described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Hence, for this and other reasons, Hamner et al. cannot be used as an anticipatory reference, and the rejections of claims 1-8 have been overcome, whereby Applicant requests the withdrawal of the rejections.

Independent claim 1 and dependent claims 2-8 are directed to a method; claims 11-18 are directed to an apparatus; and claims 21-28 are directed to a computer program product. The Office action uses an anticipation argument against claims 11-18 and 21-28 by relying on the arguments that are used against claims 1-8. Applicant's arguments with respect to the rejection of claims 1-8 are similarly applicable against the rejection of claims 11-18 and 21-28.

IV. 35 U.S.C. § 103(a)—Obviousness—*Hamner et al. in view of Srinivasan*

The Office action has rejected claims 9, 10, 19, 20, 29, and 30 under 35 U.S.C. § 103(a) as unpatentable over Hamner et al. in view of Srinivasan, "Automated, Electronic Network Based, Project Management Server System, For Managing Multiple Work-Groups", U.S. Patent Number 5,548,506, filed 03/17/1994, issued 08/20/1996. This rejection is traversed.

Claim 9 recites:

> 9. The method of claim 1 further comprising: determining whether to allow a reconfiguration operation requested by an administrative user in accordance with security authorization parameters associated with an administrative user.

The rejection states that Hamner et al. fails to teach this feature, and the rejection asserts that "Srinivasan teach (Auto Multi Project server software) where separate files containing authorization [sic] where project leader create [sic] new project required authorization [sic] (See col 7 lines 120-30 [sic])." It is entirely unclear what the rejection is attempting to state. Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of Srinivasan at the cited portion with respect to authorization of an administrative user, Srinivasan still does not remedy the defects of Hamner et al. whereby Hamner et al. fails to teach the features of independent claim 1 from which dependent claim 9 depends. Thus, a hypothetical combination of the teachings of Srinivasan and Hamner et al. cannot teach the claimed features of the present invention.

Claim 10 recites:

10. The method of claim 9 further comprising:

limiting reconfiguration operations requested by an administrative user to scopes assigned to a particular management customer.

The rejection states that Hamner et al. teaches this feature: "(See Col 5 lines 25-30, Hanmer [sic] disclosed in logical view where user definable list and Administrator can arrange devices in different way [sic] to provide most useful way to present network organization." Assuming *arguendo* that the statement in the rejection is a fair assessment of the teachings of Hamner et al. at the cited portion with respect to arranging logical views of devices, the logical argument that is presented by the rejection is a non sequitur because one cannot deduce the claimed feature of limiting reconfiguration operations with respect to a particular management customer's scope from the features in Hamner et al. concerning arrangement of logical views of devices.

Dependent claims 9 and 10 are directed to a method; claims 19 and 20 are directed to an apparatus; and claims 29 and 30 are directed to a computer program product. The Office action uses an obviousness argument against claims 19, 20, 29, and 30 by relying on the arguments that are used against claims 9 and 10. Applicant's arguments with respect to the rejection of claims 9 and 10 are similarly applicable against the rejection of claims 19, 20, 29, and 30.

Examiner bears the burden of establishing a *prima facie* case of obviousness

The examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims

under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985). In response to an assertion of obviousness by the Patent Office, the applicant may attack the Patent Office's *prima facie* determination as improperly made out, present objective evidence tending to support a conclusion of nonobviousness, or both. *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992).

Hamner et al. and Srinivasan clearly fail to disclose at least one feature of the present invention as recited within each independent claim, notwithstanding the arguments presented by the Office action, thereby rendering Hamner et al. and Srinivasan incapable of being used as primary and secondary references as argued by the current rejection. Moreover, a hypothetical combination of Hamner et al. and Srinivasan would also fail to reach the claimed invention of the present patent application. As should be recognized, because both the primary and secondary references in the rejection fail to disclose the claimed features against which the references were applied, and because the references fail to be combinable to produce these claimed features, the rejection fails to fulfill the requirements of a proper obviousness argument.

With respect to claims 9, 10, 19, 20, 29, and 30 of the present patent application, Applicant respectfully submits that

it would not have been obvious for one having ordinary skill in the art to have used the applied prior art references to reach the claimed invention. Hence, a rejection of the claims cannot be based upon the cited prior art to establish a *prima facie* case of obviousness. Therefore, a rejection of the claims under 35 U.S.C. § 103(a) has been shown to be insupportable in view of the cited prior art, and claims 9, 10, 19, 20, 29, and 30 are patentable over the applied references. Applicant respectfully requests the withdrawal of the rejection of the claims.

V. Conclusion

It is respectfully urged that the present patent application is patentable, and Applicant kindly requests a Notice of Allowance.

For any other outstanding matters or issues, the examiner is urged to call or fax the below-listed telephone numbers to expedite the prosecution and examination of this application.

DATE: September 26, 2006

Respectfully submitted,

Jeffrey S. LaBaw
Reg. No. 31,633
ATTORNEY FOR APPLICANT